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PATENT  
Attorney Docket No.: 018563-001550US  
Client Reference No.: AT-00047.4

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On 9/7/04

TOWNSEND and TOWNSEND and CREW LLP

By: [Signature]

Tiffany Wu

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re application of:

LOC X. PHAN et al.

Application No.: 10/797,215

Filed: March 9, 2004

For: EMBEDDED FEATURES AND  
METHODS OF A DENTAL  
APPLIANCE

Examiner: Unassigned

Art Unit: 3732

SUPPLEMENTAL INFORMATION  
DISCLOSURE STATEMENT UNDER 37  
CFR §1.97 and §1.98

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

The references cited on attached form PTO/SB/08A and PTO/SB/08B are being called to the attention of the Examiner. Electronic copies of the references are enclosed on 1 CD-ROM disk.

It is respectfully requested that the cited references be expressly considered during the prosecution of this application, and the references be made of record therein and appear among the "references cited" on any patent to issue therefrom.

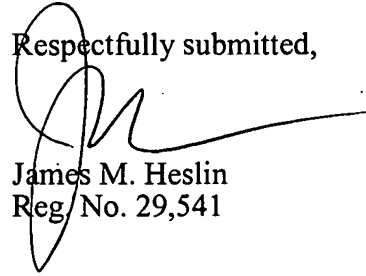
The references cited in the accompanying PTO/SB/08A and PTO/SB/08B, were identified by either or both parties in litigation between Align Technology, Inc., assignee of the above-referenced patent application, and Ormco Corporation in case no. SACV 03-16-GLT

(ANX) before the U.S. District Court, Central District of California, Southern Division, as being potentially relevant to the design, fabrication, and/or use of removable orthodontic appliances and/or to the use of computers or other automatic means for calculating final or intermediate tooth positions for orthodontic treatment.

As provided for by 37 CFR 1.97(g) and (h), no inference should be made that the information and references cited are prior art merely because they are in this statement and no representation is being made that a search has been conducted or that this statement encompasses all the possible relevant information.

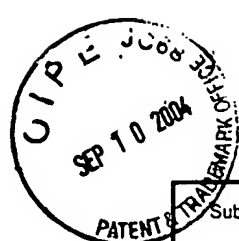
Applicant believes that no fee is required for submission of this statement. However, if a fee is required, the Commissioner is authorized to deduct such fee from the undersigned's Deposit Account No. 20-1430. Please deduct any additional fees from, or credit any overpayment to, the above-noted Deposit Account.

Respectfully submitted,



James M. Heslin  
Reg. No. 29,541

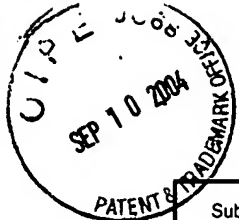
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60298656 v1



Substitute for form 1449A/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)			<b>Complete if Known</b>		
			Application Number	10/797,215	
			Filing Date	March 9, 2004	
			First Named Inventor	PHAN, LOC X.	
			Art Unit	3732	
			Examiner Name	Unassigned	
Sheet	1	of	10	Attorney Docket Number	018563-001550US

U.S. PATENT DOCUMENTS+					
Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number Kind Code <sup>2</sup> (if known)			
	AA	2,467,432	04-19-1949	Kesling	
	AB	3,660,900	05-09-1972	Andrews	
	AC	3,860,803	01-14-1975	Levine	
	AD	3,916,526	11-04-1975	Schudy	
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	BN	5,139,419	08-18-1992	Andreiko et al.	
	BO	5,184,306	02-02-1993	Erdman et al.	
Examiner Signature				Date Considered	

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Sheet <b>2</b>	of <b>10</b>	Examiner Name	Unassigned	
		Attorney Docket Number	018563-001550US	

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	BP	5,186,623	02-16-1993	Breads et al.	
	BQ	5,257,203	10-26-1993	Riley et al.	
	BR	5,273,429	12-28-1993	Rekow et al.	
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	BW	5,368,478	11-29-1994	Andreiko et al.	
	BX	5,382,164	01-17-1995	Stern	
	BY	5,395,238	03-07-1995	Andreiko et al.	
	BZ	5,431,562	11-11-1995	Andreiko et al.	
	CA	5,440,496	08-08-1995	Andersson et al.	
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	CH	5,533,895	07-09-1996	Andreiko et al.	
	CI	5,542,842	08-06-1996	Andreiko et al.	
	CJ	5,549,476	08-27-1996	Stern	
	CK	5,587,912	12-24-1996	Andersson et al.	
	CL	5,605,459	02-25-1997	Kuroda et al.	
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	CN	5,645,421	07-08-1997	Slootsky	
	CO	5,655,653	08-12-1997	Chester	
	CP	5,683,243	11-04-1997	Andreiko et al.	
	CQ	5,733,126	03-31-1998	Andersson et al.	
	CR	5,740,267	04-14-1998	Echerer et al.	
	CS	5,975,893	11-02-1999	Chishti et al.	

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Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document			Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>5</sup>
		Country Code <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (If known)				
	CT	EP	091,876	A1	10-19-1983	Duret		<input type="checkbox"/>
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	CX	EP	541,500	A1	06-12-1998	Andersson et al.		<input type="checkbox"/>

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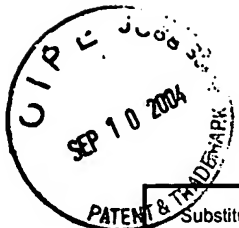


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		Country Code <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (if known)				
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	DB	FR	2,369,828	A1	06-02-1978	Suyehiro		<input type="checkbox"/>
	DC	WO	90/08,512	A1	08-09-1990	Lemcren		<input type="checkbox"/>
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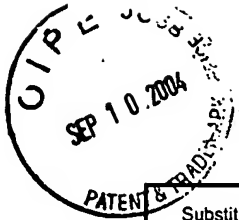
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NON PATENT LITERATURE DOCUMENTS			
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	DH	ALEXANDER et al., "The DigiGraph Work Station Part 2, Clinical Management," <i>JCO</i> (July 1990), pp. 402-407.	
	DI	ALTSCHULER et al., "Laser Electro-Optic System for Rapid Three-Dimensional (3D) Topographic Mapping of Surfaces," <i>Optical Engineering</i> , Vol. 20(6) (1981), pp. 953-961.	
	DJ	ALTSCHULER et al., "Measuring Surfaces Space-Coded by a Laser-Projected Dot Matrix," <i>SPIE Imaging Applications for Automated Industrial Inspection and Assembly</i> , vol. 182 (1979), p. 187-191.	
	DK	ALTSCHULER et al., "Analysis of 3-D Data for Comparative 3-D Serial Growth Pattern Studies of Oral-Facial Structures," Program and Abstracts of Papers, Feb. 1975, <i>Journal of Dental Research</i> , Vol. 54, IADR Abstracts 1979, 2 pages total.	
	DL	ALTSCHULER, "3D Mapping of Maxillo-Facial Prosthesis," AADR Abstract #607, 1980, 2 pages total..	
	DM	American Association for Dental Research, Summary of Activities, March 20-23, 1980, Los Angeles, CA, p. 195.	
	DN	ANDERSSON et al., "Clinical Results with Titanium Crowns Fabricated with Machine Duplication and Spark Erosion," <i>Acta Odontologica Scandinavica</i> , vol. 47 (1989), pp. 279-286.	
	DO	BAUMRIND et al., "A stereophotogrammetric system for the detection of prosthesis loosening in total hip arthroplasty, Applications of Human Biostereometrics (NATO)," Proceedings of the Society of Photo-Optical Instrumentation Engineers, Vol. 166, July 9-13, 1978, pp. 112-123.	
	DP	BAUMRIND et al., "Mapping the Skull in 3-D, Reprinted from The Journal, <i>California Dental Association</i> , Vol. 48, No. 2 (1972 Fall Issue) 11 pages total.	
	DQ	BAUMRIND et al., "Seminars in Orthodontics," <i>Seminars in Orthodontics</i> , Vol. 7, No. 4 (Dec. 2001), p. 222.	
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	DS	BAUMRIND, "Integrated Three-Dimensional Craniofacial Mapping: Background, Principles, and Perspectives," <i>Seminars in Orthodontics</i> , Vol. 7, No. 4 (Dec. 2001), pp. 223-232.	
	DT	BEGOLE et al., "A Computer System for the Analysis of Dental Casts," <i>The Angle Orthodontist</i> , Vol. 51 No. 3 (July 1981), pp. 253-259.	
	DU	BERNARD et al., "Computerized diagnosis in Orthodontics for Epidemiological Studies" (progress report), Abstracts of Papers, <i>Journal of Dental Research</i> ; Vol. 71, Special Issue March 1-14, 1992, pp. 28-36.	
	DV	BHATIA et al., "A Computer-Aided Design for Orthognathic Surgery," <i>British Journal of Oral and Maxillofacial Surgery</i> , Vol. 22 (1984), pp. 237-253.	
	DW	BIGGERSTAFF et al., "Computerized analysis of occlusion in the postcanine dentition," <i>American Journal of Orthodontics</i> , Vol. 61, No. 3 (Mar. 1972), pp. 245-254.	

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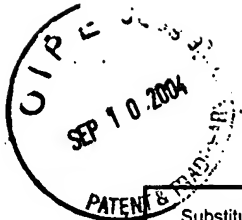
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	DX	BIGGERSTAFF, "Computerized Diagnostic Setups and Simulations," <i>The Angle Orthodontist</i> , Vol. 40, No. 1 (Jan. 1970), pp. 28-36.	
	DY	BRANDESTINI et al., "Computer Machined Ceramic Inlays: In Vitro Marginal Adaptation," <i>Journal of Dental Research</i> , Vol. 64/Special Issue/Abstracts, IADR/AADR Abstracts 1985, 1 page total.	
	DZ	BROOK et al., "An Image Analysis System for the Determination of Tooth Dimensions from Study Casts: Comparison with Manual Measurements of Mesio-distal Diameter, Abstract of Papers, 1985, Dept. of Children's Dentistry and Orthodontics, <i>J Dent Res.</i> , March 1986, pp. 428-431.	
	EA	BURSTONE (interview), "Dr. Charles J. Burstone on The Uses of the Computer in Orthodontic Practice (Parts 1 and 2)," <i>Journal of Clinical Orthodontics</i> , (Part 1) Vol. 8, No. 7, July 1979; (Part 2) Vol. 8, No. 8 pp. 539-551, Aug. 1979.	
	EB	BURSTONE et al., "Precision adjustment of the transpalatal lingual arch: Computer arch form predetermination," <i>Am. Journal of Orthodontics</i> , Vol. 79, No. 2 (Feb. 1981), pp. 115-133.	
	EC	CHACONAS et al., "The DigiGraph Work Station, Part 1, Basic Concepts," <i>JCO</i> (June 1990), pp. 360-367.	
	ED	CHAFETZ et al., "Subsidence of the Femoral Prosthesis, A Stereophotogrammetric Evaluation," <i>Clinical Orthopaedics and Related Research</i> , No. 201 (December 1985), pp. 60-67.	
	EE	CHIAPPONE, "Constructing the gnathologic setup and positioner" <i>J. Clin. Orthod.</i> , 14:121-133, 1980.	
	EF	COTTINGHAM, "Gnathologic clear plastic positioner" <i>Am. J. Orthod.</i> , 55:23-31, 1969.	
	EG	CRAWFORD, "Computers in Dentistry: Part 1: CAD/CAM: The Computer Moves Chairside," "Part 2: F. Duret — A Man With A Vision," "Part 3: The Computer Gives New Vision- Literally," "Part 4: Bytes 'N Bites' The Computer Moves From The Front Desk To The Operator, <i>Canadian Dental Journal</i> , vol. 54(9), (1988), pp. 661-666.	
	EH	CRAWFORD, "CAD/CAM in the Dental Office: Does It Work?" <i>Canadian Dental Journal</i> , Vol. 57, No. 2 (Feb. 1991), pp. 121-123.	
	EI	CROOKS, "CAD/CAM Comes to USC," <i>USC Dentistry</i> , (Spring 1990) pp. 14-17.	
	EJ	CURETON, "Correcting malaligned mandibular incisors with removable retainers" <i>J. Clin. Orthod.</i> , 30:390-395, 1996.	
	EK	CURRY et al., "Integrated Three-Dimensional Craniofacial Mapping at the Craniofacial Research Instrumentation Laboratory/University of the Pacific," <i>Seminars in Orthodontics</i> , Vol. 7, No. 4 (Dec. 2001), pp. 258-265.	
	EL	CUTTING et al., "Three-Dimensional Computer-Assisted Design of Craniofacial Surgical Procedures: Optimization and Interaction with Cephalometric and CT-Based Models," <i>Plastic and Reconstructive Surgery</i> , Vol. 77, No. 6 (June 1986), pp. 877-885.	
	EM	DCS Dental AG, "The CAD/CAM 'DCS Titan System' for Production of Crowns/Bridges" <i>DSC Production AG</i> , Jan. 1992, pp. 1-7.	

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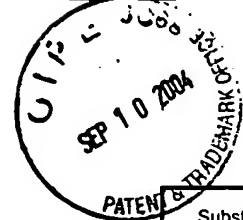
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	EN	DEFRANCO et al., "Three-Dimensional Large Displacement Analysis of Orthodontic Appliances," <i>J. Biomechanics</i> , Vol. 9 (1976), pp. 793-801.	
	EO	Dental Institute University of Zurich Switzerland, Program for International Symposium on Computer Restorations: State of the Art of the CEREC-Method, May 1991, 3 pages total.	
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	EQ	DURET et al., "CAD-CAM in Dentistry," <i>Journal of the American Dental Association</i> , Vol. 117 (Nov. 1988), pp. 715-720.	
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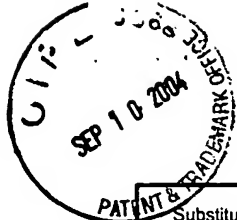
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NON PATENT LITERATURE DOCUMENTS			
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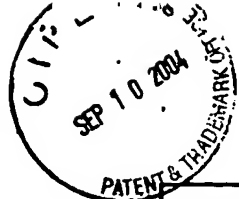
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	FZ	NASH, "CEREC CAD/CAM Inlays: Aesthetics and Durability in a Single Appointment," <i>Dentistry Today</i> , (October 1990), pp. 20, 22-23, 54.	
	GA	NISHIYAMA et al., "A new construction of tooth repositioner by LTV vinyl silicone rubber" <i>J. Nihon University School of Dentistry</i> , 19(2):93-102, 1977.	
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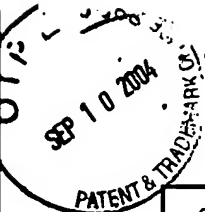
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	GL	RICHMOND, "Recording the dental cast in three dimensions," <i>Am. J. Orthod. Dentofac. Orthop.</i> , Vol. 92, No. 3, (Sept. 1987), pp.199-206.	
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	GN	SAKUDA et al., "Integrated information-processing system in clinical orthodontics: An approach with use of a computer network system," <i>Am. J. Orthod. Dentofac. Orthop.</i> Vol. 101 No. 3 (March 1992), pp. 210-220.	
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	GQ	SHILLIDAY, "Minimizing finishing problems with the mini-positioner" <i>Am. J. Orthod.</i> 59:596-599, 1971	
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	GT	STOLL et al., "Computer-aided Technologies in Dentistry" (Article Summary in English, article in German), <i>Dtsch Zahnärztl Z</i> 45, 314-322, 1990.	
	GU	U.S. Department of Commerce, National Technical Information Service, "Automated Crown Replication Using Solid Photography SM," Solid Photography Inc. Melville NY, October 1977, 21 pages total.	
	GV	U.S. Department of Commerce, National Technical Information Service, "Holodontology: An Introduction to Dental Laser Holography," School of Aerospace Medicine Brooks AFB Tex, March 1973, 37 pages total.	
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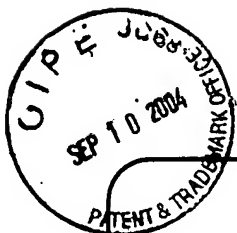
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	GZ	VAN DER ZEL, "Ceramic-fused-to-metal Restorations with a New CAD/CAM System," <i>Quintessence International</i> , vol. 24(11) (1993), pp. 769-778.	
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	HB	WARUNEK et al., "Clinical use of silicone elastomer appliances" <i>JCO</i> , MH (10):694-700, 1989.	
	HC	WARUNEK et al., "Physical and mechanical properties of elastomers in orthodontic positioners" <i>Am. J. Orthod. Dentofac. Orthop.</i> , 95:388-400, 1989.	
	HD	WELLS, "Application of the positioner appliance in orthodontic treatment" <i>Am. J. Orthodont.</i> , 58:351-366, 1970.	
	HE	WILLIAMS, "Dentistry and CAD/CAM: Another French Revolution," <i>Journal of Dental Practice Admin.</i> , Jan./March 1987, pp. 2-5.	
	HF	WILLIAMS, "The Switzerland and Minnesota Developments in CAD/CAM," <i>Journal of Dental Practice Admin.</i> , pp. 50-55, April/June 1987.	
	HG	WISHAN, "New Advances in Personal Computer Applications for Cephalometric Analysis, Growth Prediction, Surgical Treatment Planning and Imaging Processing," Symposium: Computerized Facial Imaging in Oral and Maxillofacial Surgery, AAOMS, Sept. 13, 1990, p. 5.	
	HH	YAMAMOTO et al., "Three-Dimensional Measurement of Dental Cast Profiles and Its Applications to Orthodontics," Annual Int'l Conf. of IEEE Engineering in Medicine and Biology Society, Vol. 12, No. 5, pp. 2051-2053, 1990	
	HI	YAMAMOTO et al., "Optical measurement of dental cast profile and application to analysis of three-dimensional tooth movement in orthodontics," <i>Frontiers in Med. and Biol. Eng'g</i> , Vol. 1, No. 2 (1988), pp. 119-130.	

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PTO/SB/21 (04-04)

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First Named Inventor

PHAN, LOC X.

Art Unit

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**ENCLOSURES** (Check all that apply)

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